HUNTERS POINT NAVAL SHIPYARD BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING NOTES July 2, 2014

These notes summarize the meeting of the Navy Base Realignment and Closure (BRAC) Cleanup Team (BCT) for Hunters Point Naval Shipyard (HPNS). The meeting was held at 12:30 p.m. on July 2, 2014 at Tetra Tech's HPNS site office in San Francisco, California.

I. Introductions, Meeting Guidelines, Agenda Review, and Meeting Minutes

Catherine Haran (Navy) began with introductions; participants are listed on the last page of this summary. The action items from June were completed. Ms. Haran is working with the City of San Francisco (City) to divide Parcel B into two parcels, which will include retention of all of Installation Restoration 26 (IR-26) within the Navy owned property.

II. Radiological Program Update (Hamide Kayaci, Navy)

- For the Parcel C Phase II ship berth surveys, all soil survey units (1 through 9) for Ship Berths 3, 4 and 5 are complete. The concrete survey units (10 through 13) are complete and the data is under internal quality assurance review at Ship Berths 1 and 2.
- At Buildings 211 and 253 all of the Class 1 gamma, alpha/beta, systematic swipe samples, and biased samples are complete. The Class 2 sampling is 11 percent complete. Biased samples/swipes in Class 3 areas are 100% complete.
- In Parcel E, the Navy has completed removal of 7,642 linear feet of the sanitary and storm drain systems. All 16 trench units are excavated. Of those, nine have passed screening sample analysis; three are awaiting, approved, or currently being backfilled; and four have been backfilled and restored. Approximately 26,945 linear feet of piping still remain in Parcel E/E-2 that needs to be removed/and or capped in place.
- In Parcel D-1, the Navy is awaiting unrestricted radiological release for the Gun Mole Pier following California Department of Public Health (CDPH) analysis of confirmation samples and confirmation surveys conducted on March 18.
- Additionally, the Navy has completed scanning and sampling at 17 survey units at Parcel D-1. Field work will resume onsite on July 7, 2014 and will include completion of the Ship Berths 14, 21, 22, and 29 surveys, disposal of the wooden rail ties, backfill of the open sanitary and storm drain trenches, and deconstruction and removal of radiological screening yard (RSY)-2.
- A total of 34.7 miles of sanitary and storm drain system pipelines have been removed at HPNS with 29.5 miles remaining to be removed and/or capped in place.

III. Parcel C Remedial Action Update for RU-C1, -C4 and -C5 (Tony Konzen, Navy)

- The Navy gave an overview of the in-situ bioremediation injections and noted that post-injection groundwater sampling began in March 2014 and is scheduled through March 2015. The sites are being monitored semi-monthly for the first month, monthly for the following four months, followed by two quarterly post-injection monitoring events to complete CB&I's groundwater monitoring scope for this project.
- Sampling has begun on groundwater plumes C1-1, C1-2, C1-4, C4-1, C5-1, and C5-2. The Navy presented trend graphs of the injection locations showing oxidation reduction potential (ORP), pH, and contaminant trends with time at representative wells within the groundwater plume.
- The Navy has concluded that post-injection groundwater data look favorable and demonstrate ongoing anaerobic biodegradation, showing volatile organic compound (VOC) reduction trends, and methane and ethane production. The Navy will continue to update the BCT regarding these trends in the groundwater data.
- The BCT comments on the soil vapor extraction (SVE) operation and maintenance plan are due on July 7, 2014 with SVE start-up scheduled for late July 2014.

IV. IR-03 Pilot Study Update (Danielle Janda, Navy)

- The Navy gave an update on the in-situ thermal remediation (ISTR) treatment system. They have been operating a dual recirculation system since May 8, 2014, but no measurable non-aqueous phase liquid (NAPL) has been removed from the site since June 30, 2014 and the Navy has recirculated 146,000 gallons with no measurable NAPL collected. The Navy recommends shutting the system down on July 7, 2014. No objections to shutting down the thermal system were brought forward.
- The Navy gave an update on the in-situ stabilization (ISS) pilot study. The Navy advanced five ISS columns but were only able to complete them to 44 feet below ground surface (bgs) and not 48 feet bgs as originally planned based on field safety concerns. This is a minor deviation since they found Bay Mud at 23.5 feet bgs and no sand layers within the Bay Mud as originally anticipated. The column mixes appear thicker and dryer than expected.
- The performance matrix for the pilot study is to reduce all mobile NAPL and/or trap the remaining mobile NAPL at the site. The Navy will be collecting post-ISTR sampling from at least six locations. Locations may be altered in the field due to obstructions or refusal. Boring locations will have to be moved slightly to accommodate the onsite equipment. At the ISS pilot study, two borings (cores) will be advanced to evaluate the permeability and mix consistency. The sampling for both pilot studies will be conducted in July 2014.

V. Parcel C Total Petroleum Hydrocarbon (TPH) Update (Catherine Haran, Navy)

• The Navy presented a summary of the 46 Parcel C TPH sites which currently require closure. The Navy will submit 21 Site Closeout Reports (SCRs) based on historic data for the sites.

Of those 21 sites, 11 SCRs have already been submitted and four sites (AOC 28-D, AOC 28-F, AOC 29-B, and AOC 58-B) are tentatively approved for no further action (NFA) by the Regional Water Quality Control Board (Water Board). The Water Board requested additional information for two SCRs (CAA-2 and AOC 58-A). The Navy will resubmit three SCRs (AOC 49-D, AOC 49-E, and BOC IR28B257) based on the Water Board's revised closure approach, and two SCRs are currently under Water Board review.

- The Navy gave an overview of the TPH related field work completed. Area of Concern (AOC) 30-A was excavated in January and May 2014; approximately 290 cubic yards of soil were removed and 27 sidewall and bottom confirmation samples were collected. The excavation was backfilled in June 2014. Three confirmation samples (1 bottom sample and 2 side wall samples) did not meet project screening criteria. The bottom sample exceedance is at 10 feet and no further action is anticipated. The two side wall samples will be further delineated and evaluated.
- AOC 49-A field work included collection of additional soil and groundwater samples at two locations. One sample slightly exceeded the screening criteria for benzo(a)pyrene. The data set for AOC-49A, including the post CERCLA RA excavation data for excavation 23-1, is under evaluation with respect to the petroleum strategy.
- At BOC IR22B022, the Navy advanced two borings and collected a groundwater sample. All soil and groundwater samples were below the project screening criteria and no further investigation is planned. CERCLA RA excavation CMI-1 is partially within BOC IR22B022, and the data will be evaluated in developing the SCR for the site.
- AOC 28-J field work included collection of additional soil and groundwater samples and installation of temporary wells within Building 231. Three soil samples and one groundwater sample exceeded the project screening criteria, and the data are under evaluation with respect to the HPNS petroleum strategy. The Navy will report back to the BCT regarding their questions about sample location 22-1-B20-15' and confirmation data at the corner of Building 214.
- Investigation field work for another10 TPH sites will begin in mid-July 2014. Four additional TPH sites will be sampled in November 2014 following completion of the current SVE and GW remediation. =

VI. Community Involvement Update (Catherine Haran, Navy)

- The size of the bus was increased for the Navy's bus tour based on the community response. There was an 81-person waiting list and have already been 14 requests for advance notice of the August bus tour.
- The Navy modified the tour to take less time inside Building 101 and increased the number of stops and tour time of the bus tour. The Navy distributed the Quarterly Progress Report, comment cards, and a bus tour handout.

• The Navy is planning to complete the annual update fact sheet, radiation program fact sheet, and Quarterly Progress Update in July. In addition, the Navy will finalize the Community Involvement Plan and start planning of the next bus tour on August 23, 2014.

VII. Action Items/Future Meetings (Catherine Haran, Navy)

New Action Items:

- The Navy will report back to the BCT regarding confirmation sample concentrations at AOC 28-J both near the corner of Building 214 and at location 22-1-B20-15'.
- The Navy will schedule a call with the BCT regarding AOC 28-J to discuss the proposed path forward.

Next Meetings:

• The July BCT meeting will be held on August 7, 2014.

Meeting participants:

Jeff Austin, Geosyntec Tim Kemper, CB&I

Saul Bloom, ArcEcology Ed Kilduff, CE2 Kleinfelder JV*

Karla Brasaemle, TechLaw Nathan King, Water Board

Pat Brooks, Navy* Anthony Konzen, Navy

Amy Brownell, City of SF Lily Lee, USEPA

Jamie Egan, CH2M HILL Leslie Lundgren, CH2M HILL

Mitra Fattahipour, Insight/CDM*

Tamzen MacBeth, CDM*

Catherine Haran, Navy Ryan Miya, DTSC

Mahbub Hussain, Navy* Shanti Montgomery, Tetra Tech EMI

Danielle Janda, Navy* Christina Rain, Langen

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Hamide Kayaci, Navy* Matt Wright, CDPH*

^{*} Indicates attendee participated via telephone